

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	11/10/2015 11/10/2015	Keith Millard

LM Start		Rating **	A	Issue No.	4		
LM End		Issue Type +	Ma	Location *	N/A		
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Operations & Maintenance Manuals				°		°
					°		°
DWR ID	DWR_MA0003_01_s_2013_4						
Action/Comments							
Inspector Comments: Sutter Yard has a copy of the O&M manuals.							

No Photos

LM Start		Rating **	A	Issue No.	6		
LM End		Issue Type +	Ma	Location *	N/A		
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Emergency Supplies & Equipment				°		°
					°		°
DWR ID	DWR_MA0003_01_s_2013_6						
Action/Comments							
Inspector Comments: The Sutter Yard has adequate flood fight supplies and equipment.							

No Photos

LM Start		Rating **	A	Issue No.	7
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Flood Preparedness & Training				°
					°
DWR ID	DWR_MA0003_01_s_2013_7				
Action/Comments					
Inspector Comments: The Sutter Yard has received flood fight training.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 Feather River	Right	5.11	11/10/2015 11/10/2015	Keith Millard

LM Start	0.05	Rating **	M	Issue No.	9
LM End	0.05	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.897878 °	38.897878 °
				-121.617088 °	-121.617088 °
DWR ID	DWR_MA0003_01_s_2015_9				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

No Photos

LM Start	0.78	Rating **	M	Issue No.	140
LM End	0.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.903339 °	38.903339 °
				-121.606209 °	-121.606209 °
DWR ID	DWR_MA0003_01_f_2014_140				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comments: There is a rodent hole on the landward toe road approximately 6" in diameter.					

Photo 1 of 2 : FA_2015_MA0003_195_140_20151106_00010.jpg



This photo was taken from the landward levee slope near the toe road facing north looking at an approximately 6" rodent hole. Fall 2014.

LM Start	0.78	Rating **	M	Issue No.	140 (cont)
LM End	0.78	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2015_MA0003_195_140_20151106_00011.jpg



This is another photo of the rodent hole to show its relationship to to levee toe, toe road, and drainage ditch. Fall 2014.

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Unit No. 01 Feather River	Right	5.11	11/10/2015 11/10/2015	Keith Millard

LM Start	0.80	Rating **	M	Issue No.	5
LM End	0.80	Issue Type +	Ma	Location *	LS
Category	Interior Drainage & Piping Systems			GPS Latitude/Longitude	
				Start	End
Item	Sluice / Slide Gates			38.903291 °	38.903291 °
				-121.605747 °	-121.605747 °
DWR ID	DWR_MA0003_01_s_2012_5				
Action/Comments					
Inspector Comments: This pipe leaked during the high water event of 2010/2011.					

Photo 1 of 1 : FA_2015_MA0003_195_5_20151106_00001.jpg



Levee mile 0.80, this photo is looking at the landside toe, one of these pipes leaked during the high water event of 2010/2011. A flap gate prevents flow from the waterward side to the landward side of the levee.

LM Start	1.51	Rating **	M	Issue No.	13
LM End	1.51	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.904680 °	38.904680 °
				-121.594229 °	-121.594229 °
DWR ID	DWR_MA0003_01_s_2015_13				
Action/Comments					
Repair depressions or ruts in the crown or slope.					

Photo 1 of 1 : FA_2015_MA0003_195_13_20151106_00006.jpg



Photo of a depression in the crown, taken looking at the landside.

LM Start	1.77	Rating **	M	Issue No.	14
LM End	1.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.907025 °	38.907025 °
				-121.590375 °	-121.590375 °
DWR ID	DWR_MA0003_01_s_2015_14				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

Photo 1 of 1 : FA_2015_MA0003_195_14_20151117_00013.jpg



* Location		** Rating		+ Issue Type	
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WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	11/10/2015 11/10/2015	Keith Millard

LM Start	2.18	Rating **	M	Issue No.	15
LM End	2.18	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.911869 °	38.911869
				-121.586093 °	-121.586093
DWR ID	DWR_MA0003_01_s_2015_15				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	2.18	Rating **	A/W	Issue No.	18
LM End	2.18	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.911869 °	38.911869
				-121.586093 °	-121.586093
DWR ID	DWR_MA0003_01_s_2015_18				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

No Photos

LM Start	3.20	Rating **	M	Issue No.	20
LM End	3.20	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.925909 °	38.925909 °
				-121.585401 °	-121.585401 °
DWR ID	DWR_MA0003_01_s_2015_20				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : FA_2015_MA0003_195_20_20151106_00009.jpg



Photo of slope on the landside facing upstream, areas with little vegetation appear to have eroded leaving the crown smaller.

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Unit No. 01 Feather River	Right	5.11	11/10/2015 11/10/2015	Keith Millard

LM Start	3.59	Rating **	M	Issue No.	19
LM End	3.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.930063 °	38.930063 °
				-121.590211 °	-121.590211 °
DWR ID	DWR_MA0003_01_f_2013_19				
Action/Comments					
Elderberries are blocking visibility and flood fight capability. Inspector Comments: Elderberries on the landward levee toe.					

Photo 1 of 1 : FA_2015_MA0003_195_19_20151106_00008.jpg



This photo was taken from the levee crown facing south looking down the landward levee slope at a group of Elderberries. Fall 2013.

LM Start	4.15	Rating **	M	Issue No.	1
LM End	4.18	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.937451 °	38.937937 °
				-121.588512 °	-121.588471 °
DWR ID					
Action/Comments					
Inspector Comments: 2013 - Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve. 2015: Last observed in 2013. [2015 Site ID: FHR_12-3_R]					

Photo 1 of 2 : USACE2013A_FHR_12-3_R_2.jpg



USACE 2013 Photo #1

LM Start	4.15	Rating **	M	Issue No.	1 (cont)
LM End	4.18	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : USACE2013A_FHR_12-3_R_3.jpg



USACE 2013 Photo #2

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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LM Start	4.71	Rating **	M	Issue No.	2
LM End	4.76	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.945188 °	38.945958
				-121.586096 °	-121.586394
DWR ID					
Action/Comments					
Inspector Comments: 2013 - Minor toe scour causing gradual erosion into the bank slope. 2015: Last observed in 2013. [2015 Site ID: FHR_12-8_R]					

Photo 1 of 2 : USACE2013A_FHR_12-8_R_5.jpg



USACE 2013 Photo #1

LM Start	4.71	Rating **	M	Issue No.	2 (cont)
LM End	4.76	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : USACE2013A_FHR_12-8_R_6.jpg



USACE 2013 Photo #2

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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